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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/566,291

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Isabel Cristina Gonzalez Valcarcel

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09/16/2008

ELI LILLY & COMPANY

PATENT DIVISION

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EXAMINER

MABRY, JOHN

ART UNIT

PAPER NUMBER

1625

NOTIFICATION DATE

DELIVERY MODE

09/16/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patents@lilly.com

Office Action Summary	Application No. 10/566,291	Applicant(s) GONZALEZ VALCARCEL ET AL.	
	Examiner John Mabry, PhD	Art Unit 1625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 June 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 10-13, 16, 19, 29 and 31 is/are pending in the application.
- 4a) Of the above claim(s) 5-7, 14, 18, 21, 23, 26, 27, 30 and 43 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 10-13, 16, 19, 29 and 31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Amendment(s)

Applicant's response on June 18, 2008 filed in response to the Office Action dated March 18, 2008 has been received and duly noted.

In view of this response, the status of the rejections/objections of record is as follows:

Status of the Claims

Claims 1-3, 10-13, 16, 19, 29 and 31 are pending and rejected.

Claims 4, 8-9, 15, 17, 20, 22, 24-25, 28, 32-42 and 44-49 have been cancelled.

Claims 5-7, 14, 18, 21, 23, 26-27, 30 and 43 are directed towards non-elected subject matter.

Objection(s) to the Specification

The objection to the title was been withdrawn to due Applicant's amendment.

35 USC § 112 Rejection(s)

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

The 112-2nd rejection of claims 1-3, 10-13, 16, 19, 29 and 31 regarding the phrase "A2 and R3" have been withdrawn.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The 112-1st rejection of claims 1-3, 10-13, 16, 19, 29 and 31 regarding the terms "solvate and hydrate" have been overcome in view of Applicant's amendment.

The 112-1st rejection of claims 1-3, 10-13, 16, 19, 29 and 31 regarding the scope of enablement for "R3, R7, R8 and R9" have been overcome in view of Applicant amending the claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

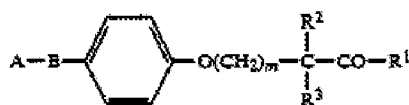
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The rejection of claims 1-3, 10-13, 16, 19, 29, and 31 under 35 U.S.C. 103(a) as unpatentable over US 4,795,753 (Kojima et al) is maintained for reasons of record in the previous office action.

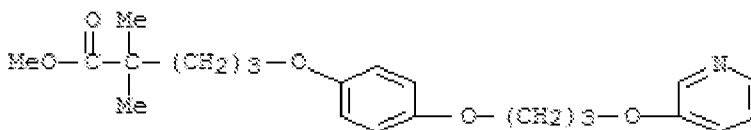
Applicant argues that the linking group at position A1 appears to be a 3-carbon alkyl that does not appear in the presently claimed invention. Applicant also argues that there are differences between the molecules of the cited art and the presently claimed molecules, and that the chemical arts are unpredictable. Applicant's arguments have been fully considered but have not been found to be persuasive. Kojima teaches that

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the A1 position of instant application m can be 1 (m=0-6) (see Formula I, right column on first page).



As previously stated: the instant application discloses compounds and pharmaceutical compositions of Formula I wherein Q=CO₂CH₃, R₄ and R₅=CH₃, A₁, A₂, A₃=O, E₁-E₅=phenyl, R₁ and R₂=H, Y=-(CH₂)₃ and Z=pyridyl (see Example 43, column 44).



The instant application differs from Kojima at positions:

(a) R₄ and R₅, Applicant's H versus Kojima's -CH₃. A hydrogen (H) and methyl (-CH₃) are deemed obvious variants (*In re Wood*, 199 USPQ 137) and

(b) Z, Applicant's pyridyl substituted with phenyl versus Kojima's pyridyl.

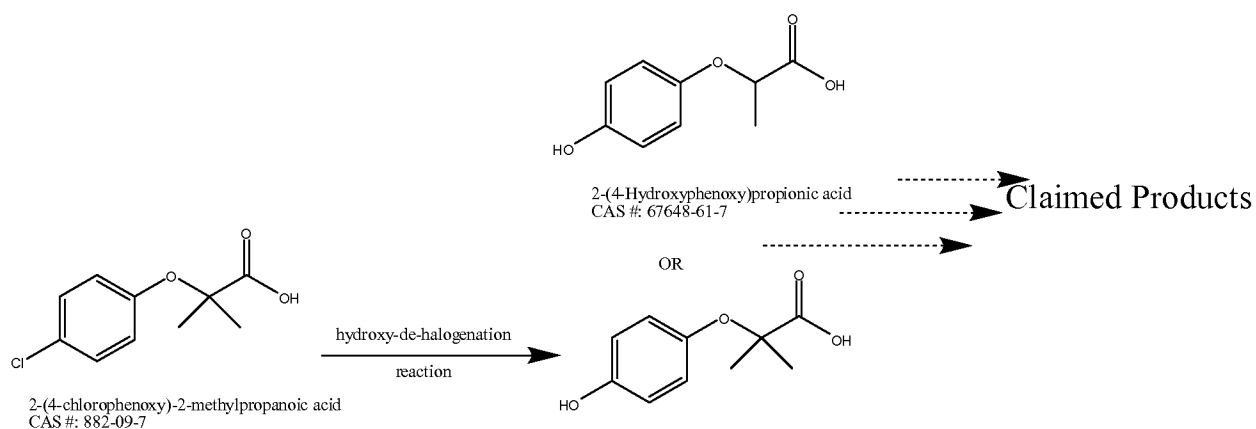
However, Kojima teaches that compounds of Formula I can be substituted with phenyl (see lines 31-33, column 4).

The Applicant argues that there is no guidance for an artisan to attempt to prepare the variants as disclosed and taught by Kojima. Below are widely-accepted reactions and commercially available starting materials that can be easily incorporated

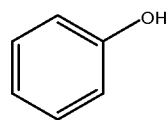
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into Applicant's disclosed synthetic schemes in the Specification in order to achieve said obvious variants.

For example, starting materials, which can be purchased from Sigma-Aldrich Company, can easily be incorporated into Applicant's "Reaction Scheme 1" (page 101, top reaction: $1 + 2 \rightarrow 3$) to achieve the methyl (or dimethyl) compounds of Kojima (which corresponds to variable R4 and R5).



Additionally, the pyridyl group corresponding to claimed variable Z can easily be substituted with phenyl using the Applicant's disclosed "Reaction Scheme 5" (top reaction, page 105) using widely-used palladium coupling chemistry. This starting material can be purchased from Sigma-Aldrich Company and can easily be incorporated into Applicant's disclosed reaction.



phenol
CAS #: 108-95-2

The 103(a) rejection of claims 1-3, 10-13, 16, 19, 29 and 31 as obvious over Tajima (US 7,22,591) and Takagi (JP 11302172) in view of Tajima (US 7,22,591) have been withdrawn. Applicant's arguments with respect to 103(a) rejections have been fully considered and are persuasive.

The 103(a) rejection of claims 1-3, 10-13, 16, 19, 29 and 31 as obvious over Morishita (J. Med. Chem. 1988, 31, 1205-1209) in view of Brooks (WO 2002/100813 – US equivalent 7,192,982) have been withdrawn. Applicant's arguments with respect to 103(a) rejections have been fully considered and are persuasive.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Conclusion

Applicant is respectfully reminded that it is required that all claims be amended to elected group. Examiner also warns Applicant not to introduce new matter when amending.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Mabry, PhD whose telephone number is (571) 270-1967. The examiner can normally be reached on M-F from 9am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, Janet Andres, PhD, can be reached at (571) 272-0867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

/John Mabry/
Examiner
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/Janet L. Andres/

Supervisory Patent Examiner, Art Unit 1625